

## Paradigm Shifts and Communications Policy Reform: Why We Need a New Digital Age Communications Act

by Senator Jim DeMint\*

### I. Recognizing Paradigm Shifts in a Changing World

In 1962, Thomas Kuhn published a groundbreaking book, "The Structure of Scientific Revolutions."<sup>1</sup> In it he argued that the progress of science is not gradual. Rather it is more like punctuated equilibrium, accompanied by periods of rapid change. Kuhn called these times of scientific revolution "paradigm shifts", a term we now use to describe any profound change in the way we view our environment. A paradigm can be viewed variously as a structure or pattern, a way of doing things, or a model for problem-solving.

Joel Barker was the first to popularize the concept of "paradigms" in our culture.<sup>2</sup> But now we see many others leaders and writers using this concept to describe the rapid change we are witnessing all around us. The best selling book, "Who Moved My Cheese,"<sup>3</sup> by Dr. Spencer Johnson, has, in its years in print, helped many to adopt a comfortable paradigm that improves their ability to confront and overcome the fear associated with the seemingly constant change in their careers and workplaces.

Joel Barker and others have warned us that paradigms create or act as powerful filters through which we sort information in our minds. Data that conforms to established paradigms passes easily through the filters, but information that doesn't conform is difficult, if not impossible, for the mind to perceive in proper context. Another way to say this is that our minds see what they expect to see. We are able to overcome this phenomenon only by recognizing the need to explore new paradigms and consider problems from different perspectives.

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\* This paper is adapted from remarks delivered by Senator Jim DeMint on March 9, 2006 at The Progress and Freedom Foundation's Digital Age Communications Act Conference in Washington, DC. Senator DeMint is a member of the Senate Commerce Committee, and on December 15, 2005, he introduced S. 2113, the "Digital Age Communications Act."

When there is a paradigm shift, old ways are replaced by a new set of rules, and everyone goes back to zero. Our adopted paradigms routinely make dealing with change and anticipating the future difficult, and they can prevent us from solving problems or recognizing breakthroughs. In spite of this, we must find ways to circumvent the current filters that prevent us from seeing the changes occurring around us.

A good method of getting control of the filters is to examine and learn from a historic example of a major paradigm shift. Take the example of the Swiss watchmakers. For more than a century, the Swiss watchmakers were world famous for excellence in hand-crafted mechanical time pieces. In 1968, they had 65% of the world's market and more than 80% of its profits. Then some researchers invented the quartz-movement watch. It was completely electronic, battery operated, and far more accurate than traditional mechanical watches. But since the prototype did not measure up to hallmarks of Swiss craftsmanship, the Swiss were reluctant to promote the design. Others like the Seiko watch company of Japan adopted the quartz technology and began flooding the market with much less costly digital watches. They found consumer demand for inexpensive watches, and within 10 years, the Swiss watchmaker's market share fell to below 10%. Reputedly, as many as 50,000 Swiss watch makers lost their jobs.

Could the history of the Swiss watch industry have been different?

## **II. The Telecom Paradigm Shift**

Today we are looking at the telecommunications industry at a time in history when the industry is undergoing great change due to the rapid introduction of new technologies. We must decide how to regulate, not just one, but multiple new and highly inter-related communications technologies. This challenge we confront easily dwarfs the example of the quartz watches replacing mechanical timepieces.

There has been a paradigm shift in technology which has created new problems—and opportunities—relating to the regulation of our telecommunications industries and their products. The computer chip, advances in transmission technology (internet protocol and wireless) and the digitization of content have fundamentally altered the marketplace. These innovations have attracted new entrants and greatly increased competition in the communications marketplace. This communications paradigm shift is more dramatic, fast-paced and technically daunting than almost anything we have experienced in the past. Massive change is happening simultaneously on multiple fronts, making decisions involving communications regulations difficult, if not impossible, when viewed through the existing filters to which we are accustomed.

In today's digital world, cable, phone, wireless, and satellite companies strive to offer competitive packages that provide consumers a complete package of video, voice, and Internet services. Internet service providers such as Google and Yahoo are poised to enter the market as well, and producers of content and applications are competing to

offer consumers rapidly expanding array of new services. Unfortunately, each provider is presently bound by a different set of burdensome rules that in many cases were written before these technologies even existed.<sup>4</sup>

Most of us are aware that wireless phones and VoIP are replacing traditional phones; that Americans are migrating from slow dial-up connections to high-speed broadband services; and that consumers listen to music or watch movies on portable gadgets. Further, wireless e-mail devices, often dubbed “crack-berries,” are gaining new addicts every day. Technological innovation has opened a whole new world of telecom services. It has transformed once-limited wires and wireless facilities into converged platforms that can deliver an array of voice, video and data.

### **III. Regulatory Policy Must Adapt to the Telecom Paradigm Shift**

A consequence of this changed environment is that cable and phone companies are attempting to rewrite their business models with an eye towards attracting their competitors’ customers. Cable companies are already offering telephone service and phone companies are ready to deploy new high-speed networks that allow them to offer video programming. But current franchise laws threaten to derail these efforts by needlessly impeding entry into new video markets. Fortunately, the FCC has sought to keep cable free from “legacy” telephone regulations.<sup>5</sup> This policy predilection should be expanded to avoid placing any unnecessary burdens on new competitors in the video market as well.

Regulatory barriers are stifling innovation and restricting consumer choice. They also are harming our standing in the global economy. Asian competitors are leaving the U.S. in the dust. A recent study shows that since 2001, America has slipped from 4th to 16th place among the top-30 world economies in the percentage of people with broadband connections.<sup>6</sup> South Korea, which ranked first in the most recent study, boasts nearly 25% of its citizens having broadband access, compared to only 12% of Americans. What’s more, Americans who do have broadband access pay nearly twice as much for it as their South Korean counterparts.

Although we are in a new world, the old paradigm that views telecommunications through a monopoly lens is preventing many of us from doing what needs to be done to reform the policy. These old paradigm filters are preventing many people from seeing that technological change leading to “service” substitution has revolutionized the industry.

We are fortunate to have these technological advancements because they allow us to replace the old public utility-type of telecom regulation with the type of regulation we know works best – fierce competition. Competition regulates the behavior of companies better than any rule the FCC could promulgate. It forces companies to innovate and to be first to bring what consumers want to the market. It also provides value for the customer not only in terms of price, but in terms of service quality. Decades of

consumer laws haven't been able to force cable to implement a viable customer service program. Competition will.

#### **IV. The New Paradigm: The Digital Age Communications Act**

To properly address this new paradigm, I am proud to have introduced S. 2113, the Digital Age Communications Act.<sup>7</sup> This legislation would sweep away the archaic rules that have accumulated over the last century and open the market to all service providers who would compete using the same rules. Consumers in a competitive market, not regulators in government, would decide what services best suit them. Providers would be driven to improve service by market forces, while the government regulatory authority, the FCC, would dramatically reduce its involvement in economic regulatory issues.

As Congress begins to debate S. 2113 and other legislation that will determine the future of our high-tech telecommunications sector, Americans should be aware that companies who currently enjoy government protection from competition. And many lawyers, consultants, and others who profit from the current system of regulatory-based litigation, will come out of the woodwork to defend their interests. Congress must recognize these pleas for what they are—the remains of an outmoded paradigm of picking winners and losers in the communications marketplace.

Like the Swiss and their watch industry, the United States has been the world leader in overall telecommunications industry innovation, investment, and employment. But we are very much at risk of suffering a fate significantly more costly than that of the Swiss watchmakers in the 1960s, if we don't change our laws.

I hope that you will review the Digital Age Communications Act, and help me educate lawmakers on Capitol Hill and others about the need bring a market-oriented regulatory regime to the new digital age of communications.

The time for action in Congress is upon us. We cannot afford any delay.

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<sup>1</sup> Thomas S. Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, 1996).

<sup>2</sup> See <http://www.joelbarker.com/index.php>.

<sup>3</sup> Spencer Johnson, *Who Moved My Cheese? An Amazing Way to Deal with Change in Your Work and in Your Life* (G. P. Putnam and Son's, 1998).

<sup>4</sup> See Randolph J. May, *Why Stovepipe Regulation No Longer Works: An Essay on the Need for a New Market-Oriented Communications Policy*, 58 FED. COMM. L. J. 103 (2006); Randolph J. May, *The Metaphysics of VoIP*, CNET, at [http://news.com.com/The+metaphysics+of+VoIP/2010-7352\\_3-5134896.html](http://news.com.com/The+metaphysics+of+VoIP/2010-7352_3-5134896.html).

<sup>5</sup> See *Nat'l Cable & Telecomm. Ass'n. v. Brand X Internet Serv's.*, 125 S. Ct. 2688 (2005).

<sup>6</sup> <http://www.itu.int/osg/spu/newslog/ITUs+New+Broadband+Statistics+For+1+January+2005.aspx>.

This is an oft-quoted study published by the International Telecommunications Union. There are others that show the U.S. ranking is not as low, but the point is that the U.S. clearly could do better.

<sup>7</sup> S. 2113, "The Digital Age Communications Act," introduced Dec. 15, 2005.